

Department of Ecology

Contaminated Site Clean Up: Follow-up

March 20, 2007

Follow-up: Why are sites in the cleanup process for 13 years?

Formal Sites "in-process" from September to December 2006

# Sites	Cleanup Step ("Cleanup" includes these steps)	Average
84	Site Discovery/Report Received	.1 years
53	Initial Investigation Sites are investigated within 90 days of being reported to the program.	.3 years
62	Site Hazard Assessment (SHA) Confirms the presence of hazardous substances and determines risk.	.3 years
96	Remedial Investigation /Feasibility Study (RI/FS) Defines the extent and magnitude of contamination at a site, potential human and environmental health, and alternatives for cleanup. Phase includes Enforcement/Agreed Order negotiations.	3.7 years 4-6 months
n/a	Public Comment Period Opportunity to receive feedback.	.1 to .3 years
55	Cleanup Action Plan (CAP) Preferred cleanup methods and specifies cleanup standards. Phase includes Consent Decree negotiations.	1.1 years 9-12 months
n/a	Public Comment Period Opportunity to receive feedback.	.1 to .3 years
43	Cleanup Engineering Design Fewer sites, more complex sites use this step.	3 years
42	Cleanup Construction Includes design, construction, operation and monitoring of cleanup actions. May be in cleanup construction or monitoring.	3 years
180 site sample	IF a site went through all these steps sequentially -- Total: 11.9 years	

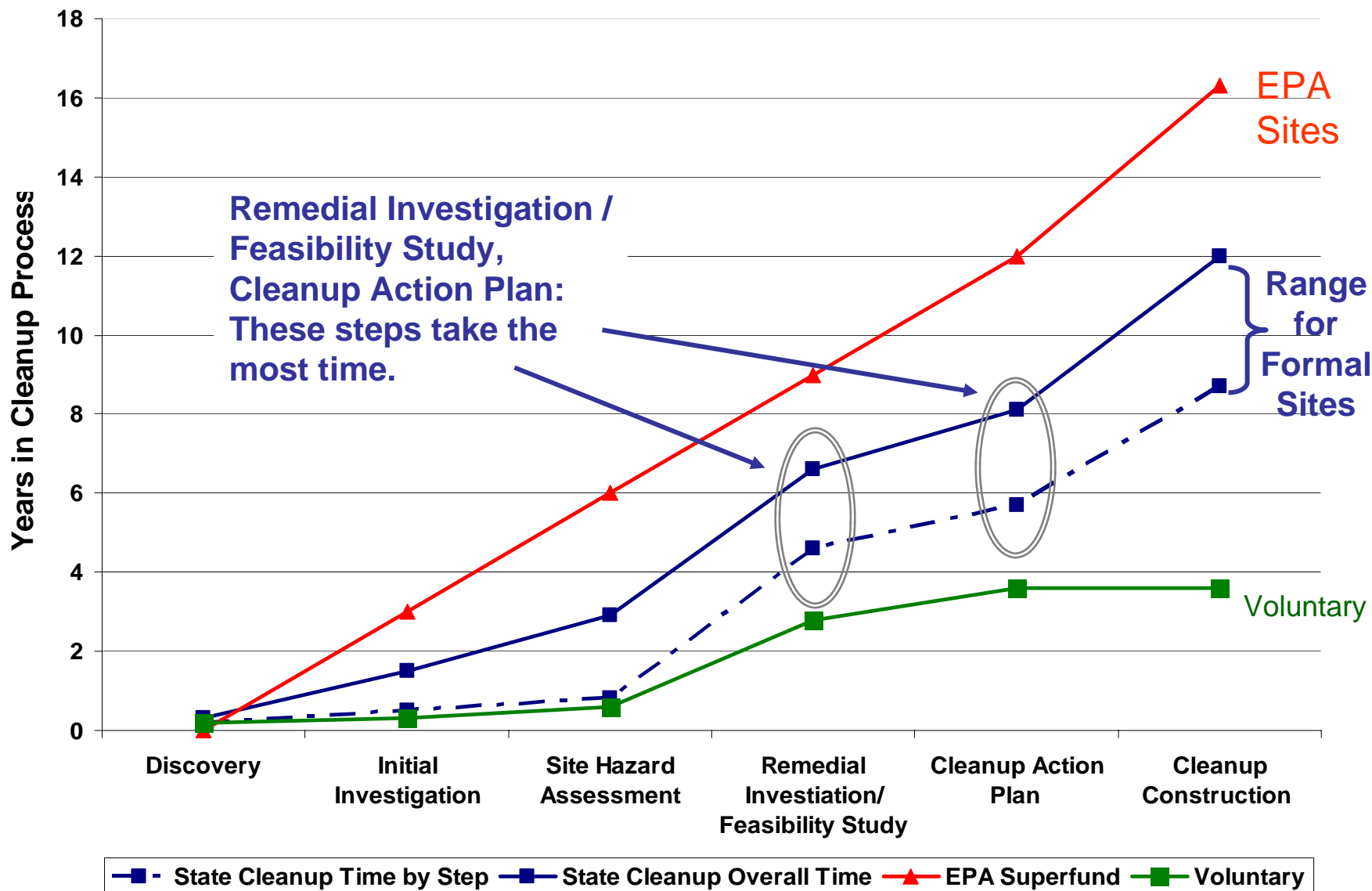
Insights and Notes:

- Difficult to simplify a complex process.
- Not all sites go through all steps. Not a linear process.
- Some sites may go straight into the SHA or RI/FS.
- Some steps may overlap.
- There may be time between steps, especially pre-RI/FS.
- Actual cleanup construction is a shorter part of the whole process.

Next Steps:

- Shorten RI/FS and CAP phase.
- Work on sites in geographical groups where possible to expedite work steps.
- Change the historical model of addressing contaminated site cleanups.
- Overlap cleanup steps where possible.
- Manage priority sites that have stalled to get the cleanup completed.

Time Puget Sound sites have been in the process of being cleaned up: *September to December 2006*



Follow up: Puget Sound Contaminated Site Cleanups

Analysis

- ☐ Remedial Investigation/Feasibility Study and Cleanup Action Plan phases take the longest.
- ☐ Complexity of site plays role in length of time to clean up.
 - Voluntary cleanups averaged 3.6 years.
 - **Formal cleanups averaged 12 years.**
 - EPA managed sites averaged 16.3 years.

Challenges

- ☐ Issues which will need to be addressed include:
 - Continued funding for orphaned / abandoned properties.
 - Discovery of new contamination during RI/FS.
 - Polluters that don't want to pay for the cleanup.
 - Polluters that are unable to pay for the cleanup.
 - Identification of contributors to contaminated sites.
 - Funding for cleanup of State Owned Aquatic Lands.

Next steps to shorten the length of formal cleanups	Target Dates	Status
Identify sites that have "stalled" during cleanup. Shift to state leadership role on managing these sites to expedite the cleanup process in step with funding and staffing. (Nord, Lawson, Alexander)	September 2006	Identification completed
Stronger state leadership role beginning with negotiations and carrying through Remedial Investigation/Feasibility Study. Include schedules in Agreed/ Enforcement Orders. (Nord, Lawson)	October 2007	Initiated March 2007
Consider use of "model" or presumptive remedies and state remedy preferences early in the process. Include schedules for cleanup actions in Agreed/ Enforcement Orders and Consent Decrees. (Nord, Lawson)	October 2007	Initiated March 2007
Work on sites in geographical groups where possible to expedite cleanups and enhance public/private participation. (Nord, Lawson)	October 2007	Initiated March 2007